| 1 | 2 | 3 | 4 |
|---|---|---|---|
| April . . . . | 18.1 mm | 19.5 .. mm | 18 9 mm |
| May . . . . | 24.2 .. | 50.4 .. | 49 1 .. |
| June . . . . | 132 6 ,, | 61 6 " | 104.8 " |
| July . . . . | 252 0 „ | 92·7 „ | 179 7 „ |
| August . . . . | 217·8 „ | 101·9 „ | 157 1 „ |
| September . . . | 191 4 „ | 130 1 „ | 165 1 „ |
| October . . . . | 71 3 „ | 117 4 „ | 199 0 „ |
| November . . . | 17.0 „ | 72 5 „ | 95 4 „ |
| December . . . | 6.4 „ | 24 1 „ | 22 8 „ |
| Annual . . . . | 951.4 mm | 686 2 mm | 1016 8 mm |

(b) During 1982—88, the variation expressed as percentage departure from long period annual average over these regions are as per the table below:

Table: Annual Rainfall (Percentage departure from long period average)

| Year | Telegana | Rayalaseema | Circars Regions (Coastal Andhra Pradesh) |
|---|---|---|---|
| 1982 . . . . | —1 | —16 | —16 |
| 1983 . . . . | 51 | 40 | 18 |
| 1984 . . . . | —26 | —18 | —29 |
| 1985 . . . . | —26 | —18 | 1 |
| 1986 . . . . | 0 | —26 | 3 |
| 1987 . . . . | 3 | 22 | 13 |
| 1988 . . . . | 32 | 25 | 6 |

(c) Number of raingauges in Telengana, Rayalaseema and Circars Regions of Andhra Pradesh are 242, 179 and 303 respectively. Ratio of number of raingauge stations and land area in Talengana Rayalaseema and Circars Regions of Andhra Pradesh are one raingauge station per 474, 386 and 307 sq. km. respectively.

(d) Number of raingauge stations functioning in the country is 6253.

(e) One raingauge station per 512 sq. Km. for the country as a whole.

**Water bearing Subsoil Zones detected by Soviet Space Ship Salyut-7 in UP/MP Area**

3064. DR. YELAMANCHILI SIVAJI: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that Soviet spaceship SALYUT-7 has discovered

Water bearing subsoil zones in Uttar Pradesh, Madhya Pradesh border which is traditionally waterless; if so, the zones which have been actually tested for water;

(b) whether it is also a fact that an instrument called "GHIDROSKOP" developed by the siberian department of the USSR Academy of Sciences, is effective for prospecting water upto a depth of 100 metres without drilling wells and that the instrument has already been tested in eight areas of our country with different geological structures; and

(c) if so, details thereof and whether this instrument is useful for prospecting water in the chronically drought prone Rayalaseema area of Andhra Pradesh?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (PROF. M. G. K. MENON): (a) Under joint Indo-Soviet Remote Sensing experiment—TERRA on board Salyut-7, groundwater resource evaluation of Chambal river basin falling in parts of Madhya Pradesh and Rajasthan have been carried out. Also, under the same experiment, geomorphological mapping in Patna-Sasaram-Varanasi (parts of Bihar and Uttar Pradesh) has been carried out. Buried channels, meanders and various other hydrogeomorphic units indicating potential of groundwater occurrence were identified. However, under National Drinking Water Technology Mission, using Indian Remote Sesing Satellite (IRS-1A) ad other satellite data, ground water potential zone maps have been prepared on 1:250,000 scale for all the 447 districts in the country by the Department of Space. The success rate of drilling borewells using these maps has been quite high, being about 90—92 per cent on an average. Further, under Integrated Land and Water Resources Studies, groundwater potential jone maps on 1:50,000 scale are being prepared for 18 drought prone districts in the country, including Ananthapur District, towards evolving strategies for combating drought on long term basis.

(b) and (c) Under Indo-USSR cooperation programme between National Geophysical Research Institute (NGRI) a laboratory of the Council of Scientific and Industrial Research (CSIR) at Hyderabad, Central Ground water Board and Novosibirsk Branch in Water Prospecting of Academy of Sciences, USSR, "GHIDROSKOP" was field tested in India at 28 locations. Further research and development is required to improve the performance of "GHIDROSKOP" in Indian conditions for determining water bearing subsoil zones.

**Report of US based National Toxics Campaign on Toxic Materials around Union Carbide Plant**

3065. SHRI B. K. HARIPRASAD: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether a recent report of US based National Toxics campaign has found dangerous toxic materials around Union Carbide Plant at Bhopal as reported in the Statesman dated the 5th July, 1990, if so, the details thereof;

(b) what were the different toxic materials found and the area of coverage of the toxics;

(c) whether Government had conducted any similar study in this direction;

(d) if so, details thereof; and

(e) if not, the reasons thereof?

THE MINISTER OF ENVIRONMENT AND FORESTS (SHRI NILAMANI ROUTRAY): (a) and (b) A report, dated April 24th, 1990 of the National Toxics Campaign Fund, Boston, state that tests were performed on three different media including.

(1) Sediments from the waste storage area.

(2) Surface soils proximate to the abandoned plant; and